

REMARKS

This responds to the Final Office Action dated April 19, 2010.

No claims are amended, no claims are canceled, and no claims are added in this response; as a result, claims 39–57 remain pending in this application.

The Rejection of Claims Under § 103

Claims 39–57 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKaughan et al (U.S. Patent 5,802,305) [hereinafter *McKaughan*] in view of Hirata et al. (U.S. Patent 5,727,149) [hereinafter *Hirata*]. Applicant respectfully traverses the combination for at least the following reasons.

The rejection states that McKaughan “teaches waking the host computer if an incoming packet meets filtering protocols” but “does not specifically teach that the filtering protocols comprise comparing a port identifier of the received packet to a port number assigned to an application executing on the host computer using a port filter of the network adapter.” Hirata is cited in an attempt to cure this deficiency of McKaughan. The rejection states that Hirata discloses “when the received packet is addressed to the host computer and the port identifier does not match the port number, discarding the received packet using the port filter.”

McKaughan uses a list, which is stored in the network adapter, to match incoming packets to determine whether to wake the computer.¹ The actual matching comprises a single step of comparing filter masks to the incoming packet to determine if it is an "accept" or a "reject" packet.² Accordingly, McKaughan discloses a rather limited filtering protocol. It does not teach or suggest the two step process of “*when the received packet is not addressed to the host computer, discarding the received packet*” and “*when the received packet is addressed to the host computer and the port identifier does not match the port number, discarding the received packet using the port filter without waking up the host computer,*” as recited in claim 39.

Hirata, a contemporary of McKaughan, suggests the reason for the limited nature of McKaughan’s filtering when it states “an Ethernet medium access processing function is the

¹ McKaughan, col. 7 ll. 10–38 (discussing “ACCEPT” and “REJECT” packets).

² McKaughan, col. 8 ll. 10–27; col. 8 l. 52–col. 9 l. 13 (although describes as multiple steps the)

utmost which can be provided on board of a general purpose LAN adapter,”³ which is why the filtering related in Hirata is performed by an external device. The external device is shown in figure 1 of Hirata as “network interface apparatus 101” and is clearly shown as distinct from the LAN adaptor 110 and even the computer 109. Accordingly, the related network interface simply operates as a line filter and is only capable of communicating to the computer through the LAN adapter⁴ meaning that it has no ability to wake the receiving computer. As such, there is no reason to combine these two references because: a) they operate at different locations in the communication stream; and b) Hirata teaches an external device so as not to be limited by network adaptors available at the time McKaughan issued.

Further, Hirata’s port filtering is performed only on a packet with a broadcast bit set.⁵ Hirata simply does not teach or suggest “*comparing a destination address of the received packet to an address of the host computer using a pattern filter of the network adapter to determine if the received packet is addressed to the host computer; when the received packet is not addressed to the host computer, discarding the received packet,*” as recited in claim 39.

Hirata appears to show using a socket port number to filter, however the purpose of Hirata appears to be keeping a computer running at full speed in a processing operation, not to save power. Column 11, lines 58-61 recites that “unnecessary data is discarded on the network interface side in each computer, thereby making it possible to prevent a wasteful receiving interruption.”

Applicant respectfully submits that combining McKaughan with Hirata as suggested would destroy the purpose of overcoming the deficiencies of LAN adapters by using an external device. Further, McKaughan only teaches a simple filtering process based on comparing packets to masks and not more complex abilities to analyze incoming packets. Accordingly, a 35 USC §103(a) rejection is not supported because the cited references cannot be combined as suggested.

Additionally, neither reference teaches or suggests the two step process of “*when the received packet is not addressed to the host computer, discarding the received packet*” and “*when the received packet is addressed to the host computer and the port identifier does not match the port number, discarding the received packet using the port filter without waking up the*

³ Hirata, col. 2 ll. 57–59.

⁴ Hirata, col. 2 ll. 43–46.

⁵ Hirata, Fig. 12; col. 10 ll. 1–5, 23–27.

host computer,” as recited in claim 39. Accordingly, a 35 USC §103(a) rejection is not supported because the cited references do not teach or suggest each element of claim 39 and so claim 39 is allowable.

Independent claims 45 and 52 recite similar subject matter to claim 39 and are allowable for at least the reasons stated above. Reconsideration and withdrawal of the rejection is respectfully requested with respect to Applicant’s independent claims 39, 45, and 52.

Additionally, with regard to claim 43, the rejection appears to mistake indexing “user program” “in such a manner that the identification code characteristic of each application is applied as a reference for filtering”⁶for “*loading executable instructions from the received program information using the port filter; and processing the executable instructions using a processor of the port filter to configure the port filter to filter packets*,” as recited in claim 43. In fact, the filtering data is preprocessed and delivered to the network interface.⁷ Also, as previously noted, McKaughan is limited to simple matching as well. Thus, neither McKaughan nor Hirata teach or suggest all of the elements of claim 43 and so claim 43 is allowable. Claim 57 recites similar subject matter and is allowable for at least the same reasons.

Reconsideration and withdrawal of the rejection is respectfully requested with respect to the remaining claims that depend therefrom at least as depending on allowable base claims.

⁶ Hirata, col. 11 ll. 48–51.

⁷ Hirata, col. 9 ll. 64–67.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's representative at (612) 373-6900 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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